

AMENDMENTS TO THE SPECIFICATION

Please replace the first entire paragraph on page 3, with the following amended paragraph:

The invention further provides nucleotide sequences of plasmids pTacRT-Q84N-D524N and TacRT-Q84A-D524N as described in ~~SEQ1 and SEQ3~~ SEQ ID NO: 1 and SEQ ID NO: 3, repectively. pTacRT-Q84N-D524N and TacRT-Q84A-D524N express murine leukaemia virus reverse transcriptases with amino acid sequences described in ~~SEQ2 and SEQ4~~ SEQ ID NO: 2 and SEQ ID NO: 4, repectively. The host cell expressing these proteins is *Escherichia coli* BL21. Both ~~SEQ1 and SEQ3~~ SEQ ID NO: 1 and SEQ ID NO: 3 are composed of 7488 nucleotides with an open reading frame between the 1515th and 3527th nucleotides. Both ~~SEQ2 and SEQ4~~ SEQ ID NO: 2 and SEQ ID NO: 4 are composed of 671 amino acids.

Please replace the paragraph bridging pages 3 and 4, with the following amended paragraph:

1, Construction of plasmid pTacRT-Q84A-D524N

The Q84A substitution was introduced into MLV-RT-D524N to generate MLV-RT-Q84A-D524N.

The Q84A mutation in the MLV-RT-D524N (*Blain, S.W & Goff, S.P. (1995) J. Virol. 69, 4440--4452.*) backbone was constructed by replacing the AflII-MfeI fragment of pTacRT-D524N (nt1467-2058) with two PCR-derived fragments AflII-EcoR1 and EcoRI-MfeI . The 300bp AflII-EcoR1 fragment was generated using forward primer (5'GTGGAATTGTGAGCCGA)(SEQ ID NO: 5) and a mutation specific reverse primer Q84A-

AP

(5' CGGAATTCCCGCGTCCAACAGTCTCTGTA)(SEQ ID NO: 6) bearing silent mutations creating a restriction site; the 300bp EcoRI-MfeI fragment was generated using reverse primer

(5'TGGGAGTCTGGTCCAGG)(SEQ ID NO: 7) and a mutation specific forward primer Q84A-SP (5'CGGAATTCTGGTAOOCTGCCAGTC)(SEQ ID NO: 8) bearing silent mutations creating the same restriction site as created in the 5' fragment. The codon for alanine was built in the mutation specific primers. The restriction sites built in the primers are underlined. The AflII-EcoRI fragment (nt1467-1770) and EcoRI-MfeI fragment (nt1770-2058) were inserted into a 6.9 kb vector, pTacRT-D524N, which was digested with AflII/-MfeI. The ligation mixture was transformed into *Escherichia coli* Top 10 and pTacRT-Q84A-D524N clones were picked based on restriction enzyme deigestion analysis. The result of nucleotide sequencing showed that the sequence of pTacRT-Q84A-D524N was the same as the sequence in ~~SEQ 4~~SEQ ID NO: 1.

Please replace the second paragraph on page 6, with the following amended paragraph:

1, Construction of plasmid pTacRT-Q84N-D524N

The Q84N substitution was introduced into MLV-RT-D524N to generate MLV-RT-Q84N-D524N.

The Q84N mutation in the MLV-RT-D524N (*Blain, S.W & Goff, S.P. (1995) L Tirol. 69,4440-4452*) backbone was constructed by replacing the AflII-MfeI fragment of pTacRT-D524N (nt1467-2058) with two PCR-derived fragments AflII-EcoRI and EcoRI-MfeI . The 300bp AflII-EcoRI fragment was generated using forward primer (5'GTGGAATTGTGAGCCGA)(SEQ ID NO: 5) and a mutation specific reverse primer Q84N-AP (5'CGGGATCCCGTTGTCCAACAGTCTCTGTA)(SEQ ID NO: 6) bearing silent

mutations creating a restriction site; the 300bp EcoRI-MfeI fragment was generated using reverse primer

(5'TGGGAGTCTGGTCCAGG)(SEQ ID NO: 7) and a mutation specific forward primer Q84N-SP (5'CGGGATCCTGGTACCCTGCCAGTC)(SEQ ID NO: 8) bearing silent mutations creating the same restriction site as created in the 5' fragment. The codon for asparagine was built in the mutation specific primers. The restriction sites built in the primers are underlined. The AflII-BamHI fragment (nt1467-1770) and BamHI -MfeI fragment (nt1770-2058) were inserted into a 6.9 kb vector, pTacRT-D524N, which was digested with AflII and MfeI. The result of nucleotide sequencing showed that the sequence of pTacRT-Q84N-D524N was the same as the sequence in ~~SEQ-3~~SEQ ID NO: 3.